**PATENT** 

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

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STEPHEN M. ALLEN ET AL.

CASE NO.: BB1429 US NA

FEB 2 8 2002

**APPLICATION NO.: 09/740,288** 

**GROUP ART UNIT: 1652** 

TECH CENTER 1600/2900

FILED: DECEMBER 19, 2000

EXAMINER: M. WALICKA

FOR: PLANT BIOTIN SYNTHASE

## AMENDMENT AND RESPONSE TO RESTRICTION REQUIREMENT

Commissioner of Patents and Trademarks Washington, DC 20231

Sir:

In response to the Office Action of January 2, 2002, and before examination on the merits, please amend the above-referenced application as follows and consider the following remarks:

## IN THE CLAIMS:

Please cancel claims 6-8, 16-20, 22, and 23.

## Please replace the following claims:

- 1. "amended" An isolated polynucleotide comprising:
- (a) a nucleotide sequence encoding a polypeptide having biotin synthase activity, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:22 or 24 have at least 85% sequence identity based on the Clustal alignment method, or
- (b) the complement of the nucleotide sequence, wherein the complement and the nucleotide sequence contain the same number of nucleotides and are 100% complementary.
- 2. "amended" The polynucleotide of Claim 1, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:22 or 24 have at least 90% sequence identity based on the Clustal alignment method.
- 3. "amended" The polynucleotide of Claim 1, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:22 or 24 have at least 95% sequence identity based on the Clustal alignment method.
- 4. "amended" The polynucleotide of Claim 1 wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:22 or 24.
- 5. "amended" The polynucleotide of Claim 1, wherein the nucleotide sequence comprises the nucleotide sequence of SEQ ID NO:21 or 23.
  - 14. "amended A method for producing a nucleic acid molecule comprising
  - (a) selecting applynucleotide of Claim 1, and

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